

WHAT IS CLAIMED IS:

1 1. A cloned and isolated nucleic acid encoding a *Bacillus anthracis* sasp-
2 B protein having greater than 90% homology to the *Bacillus cereus* sasp-B DNA.

1 2. The nucleic acid of claim 1 having the nucleic acid sequence of SEQ
2 ID NO: 87.

1 3. The nucleic acid of claim 1, further comprising the full length coding
2 sequence for said sasp-B protein.

1 4. The nucleic acid of claim 1 having the nucleic acid sequence of SEQ
2 ID NO: 107.

1 5. The nucleic acid of claim 1, wherein the nucleic acid encodes SEQ ID
2 NO: 92.

1 6. An antibody that selectively binds to the *Bacillus anthracis* sasp-B
2 protein.

1 7. The antibody of claim 6, wherein the *Bacillus anthracis* sasp-B protein
2 has an amino acid sequence of SEQ ID NO: 92.

1 8. The antibody of claim 6, wherein the antibody binds to the epitope
2 encoded by TAGCATT.

1 9. The antibody of claim 6, wherein said antibody is a monoclonal
2 antibody.

1 10. A nucleic acid primer that hybridizes specifically to the sasp-B DNA
2 of *Bacillus anthracis*.

1 11. A nucleic acid probe that hybridizes to the sequence 5' -TAG CAT T -
2 3'' or the complimentary strand thereof.

1 12. A method for the detection of *Bacillus anthracis* (B.a.) in a sample,
2 comprising the steps of:

3 (a) incubating the sample with amplification primers that hybridize to the
4 *Bacillus anthracis* sasp-B gene;

- 5 (b) amplifying a target sequence between the hybridized primers; and
6 (c) detecting the presence of amplified *Bacillus anthracis* sasp-B gene
7 sequences.

1 13. The method of claim 12 comprising the steps of detecting the presence
2 of an insert having SEQ ID NO: 107.

1 14. The method of claim 12, wherein the method of amplifying the sasp-B
2 gene comprises the use of the polymerase chain reaction.

1 15. The method of claim 12, wherein the sasp-B gene primers hybridize to
2 the forward and reverse strands of sequence of SEQ ID NO: 87.

1 16. The method of claim 12, wherein said detecting step comprises the step
2 of hybridizing the amplified fragment to a probe specific for the *Bacillus anthracis* sasp-B
3 gene.

1 17. A method for detecting the presence of *Bacillus anthracis* in a sample
2 comprising the step of:

- 3 (a) incubating said sample with an antibody to the *Bacillus anthracis* sasp-
4 B protein; and
5 (b) detecting the binding of said antibody to *Bacillus anthracis* sasp-B
6 protein in the sample.

1 18. The method of claim 17, wherein said antibody is a monoclonal
2 antibody.

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